# Before the FEDERAL COMMUNICATIONS COMMISSION

Washington, D.C. 20554

In the Matter of:	)	
Amendment of Part 97 of the Commission's Amateur Radio Service Rules to Permit Greater	) ) )	NPRM 16-239
Flexibility in Data Communications	)	
Amendment of Part 97 of the Commission's	)	
Amateur Radio Service Rules to Reduce Interference	)	RM-11831
and Add Transparency to Digital Data Communications	)	

### COMMENTS IN SUPPORT OF NYU PETITION FOR DECLARATORY RULING

#### Introduction

I would like to thank the Commission for this opportunity to provide comments on the petition filed on behalf of New York University<sup>1</sup> by Dr. Theodore Rappaport, and Dr. Michael Marcus which requests much needed Part 97 clarification and reforms. I will provide additional comments on current problems that need to be resolved before any further action is taken on RM-11708, or WT 16-239, and the recent submission by the ARRL<sup>2</sup> in those proceedings.

1. The Commission has stated numerous times that all amateurs need to understand other amateur transmissions upon hearing them. If this is still the opinion of the Commission action must be taken on the NYU submission to ensure digital transmissions remain available for over the air copy by anyone, including members of the general public that may be listening. Without transparency the ability of amateurs to self-police their spectrum to ensure no commercial encroachment, or other inappropriate use, is severely compromised. The amateur bands are a public resource and communications should be

<sup>1</sup> https://ecfsapi.fcc.gov/file/1008135726267/NYU%20Wireless%20Ex%20Parte%20Filing%20-%2010.08.19.pdf

<sup>2</sup> https://ecfsapi.fcc.gov/file/10918259487629/ARRL%2016-239%2C%20RM-11759%2C%20RM-11828%2C%20RM-11831.pdf

open to all interested in listening in. Students or prospective amateurs get to see, hear, and understand what the service has to offer if transmissions are transparent. Connecting schools with the ISS as an example.

- **2.** The rules cited in the NYU filing, and more, are in serious need of updating and clarification to reflect the current rapidly evolving state of amateur radio. Specific areas of concern are third party rules and bypass of commercial services, particularly in regards to email and file transfers between amateurs and non-licensed internet users, when readily available alternate services exist.
- 3. The opposition to digital modes transparency and the ability of all amateurs to participate in self policing is almost exclusively coming from The Amateur Radio Safety Foundation Inc. (ARSFI), parent organization for the Winlink system, and the users of the Winlink system emergency communicators and off shore recreational boaters bypassing commercial email systems and the desire to keep their communications private. RM-11699 was one recent attempt to gain fully encrypted transmissions, comments were filed by Winlink administrators in support of that proceeding<sup>3</sup> <sup>4</sup>. In numerous filings, as far back as 2012<sup>5</sup>, by the Winlink system administrator Steve Waterman, the request for encryption is a recurring theme, most recently in ET Docket 17-344<sup>6</sup>. A comment by Waterman in response to a query for examples of Winlink's use during actual emergencies exposes the ARSFI agenda for a private network, and the lack of suitable emergency use examples, "you won't find many". (Appendix 1). ARSFI has also stated their administrators, gateway operators, and clients, are better qualified to monitor and 'self-police' their system than average amateur operators<sup>7</sup>, suggesting that ARSFI should be the only group with access to the messages on their system—a private network.

<sup>3</sup> https://ecfsapi.fcc.gov/file/7520932338.pdf

<sup>4</sup> https://ecfsapi.fcc.gov/file/7520927665.pdf

<sup>5</sup> https://ecfsapi.fcc.gov/file/7021918198.pdf

<sup>6</sup> https://ecfsapi.fcc.gov/file/10123298305905/%2017-344.pdf

<sup>7</sup> https://ecfsapi.fcc.gov/file/120566997404/ARSFI\_Comments.pdf

Most commenters in favor of RM-11708 and WT 16-239 are narrowly focused on legalizing Pactor 4 for use on the Winlink system and not the broader issues of transparency for all digital modes or experimentation.

- **4.** ARSFI claims Winlink is an emcomm system, it may be useful for that purpose, but their web site is heavily oriented toward marine content suggesting that email for recreational boaters is the primary purpose of the Winlink system. For example on the "Book of Knowledge" page<sup>8</sup>, below the "Getting Started" information, the top three links are a FAQ and the next two are, "Quick Start Links for Mariners (and everyone)" and a presentation given to the Seven Seas Cruising Organization, a recreational off shore boating group. Not a single topic on the entire page is titled for emergency communications information, unless the "and everyone" in the first link is meant to refer to emergency communications. The link titled "Articles and Application Stories" is light on emergency use details and loaded with yet more 'at sea' material.
- 5. The above, coupled with the lack of documentary evidence of actual 'emergency' use points to a different intended purpose of the Winlink system. Many recent STA's were issued for Pactor 4 use but there is a dearth of evidence of actual use in any of the events, only weak anecdotal statements that Winlink was 'used' with no mention of frequencies used, message type, message count etc., in addition to the Winlink system administrator saying "there aren't many" examples of Winlink use for real emergencies. Without some supporting evidence these statements have no value.
- **6**. The Winlink system is being used as a bypass of alternate radio services on a 'regular basis' in open defiance of §97.113(a)(5). Many stations are using the Winlink system as a daily general purpose email service to and from the internet, when alternate radio services exist, e.g., Iridium, Ocens, Globalstar, etc., to fulfill the need. How many email exchanges per day by a single individual before it

<sup>8</sup> https://winlink.org/content/winlink book knowledge

can be considered use on a 'regular' basis? Multiple Winlink users can be found that engage in this 'bypass' practice. (Appendix 2 examples).

- 7. If these modes and methods are really important for emcomm as claimed, then allow their use ONLY for emcomm and limit practice sessions on a few **specified** days each month, and not use amateur radio as a bypass to commercially available email services. If it's truly about amateurs supporting emergency communications, then operating under rules similar to the officially sanctioned Radio Amateur Civil Emergency Service (RACES) rule §97.407 (d) (4) is appropriate for the purpose and will ensure the amateur service can be used for real emergencies but will not be used as a general purpose effectively commercial email system.
- **8**. Also directly related to the NYU filing is the *ex parte* presented by the ARRL<sup>9</sup>. The *ex parte* was supposed to represent a resolution passed by a 14 to 1 vote in minute 31 of the July 2019 Board of Directors meeting<sup>10</sup>, it does not. I support the ARRL Board of Directors resolution for the six items, as passed, to be presented to the Commission regarding WT 16-239. By leaving this item out and declaring everything except removing the 300 baud limit and instituting a 2.8kHz bandwidth on digital transmissions, as "outside the scope" of the proceeding, the filing does not reflect the Board's requests. The Board clearly set preconditions before the changes to baud rate and bandwidth limits were to be applied, none of which have been met by the actual document that was filed. While the ARRL *ex parte* acknowledged some of the issues from the Board's six points the omission of the preconditions spelled out in item 4 amounts to kicking the can down the road, the problems exist now and need resolution now.
- "(4) Reiterate to the Commission the need to remove, and the benefits of removing, the current baud limitations, *subject to the conditions requested* by the ARRL herein;" (emphasis added)

<sup>9</sup> https://ecfsapi.fcc.gov/file/10918259487629/ARRL%2016-239%2C%20RM-11759%2C%20RM-11828%2C%20RM-11831.pdf

<sup>10</sup> http://www.arrl.org/files/file/2019%20Board%20of%20Directors/Final%20Minutes%20July%202019.pdf

If the full Board had the opportunity to review and sign off on the *ex parte* as filed it is a bit disingenuous considering the resolution was passed on a 14 to 1 vote. If on the other hand the Board was not given the chance to review the submission, and it was steered by other forces outside their control, it shows there is an internal problem at the ARRL working against the wishes of the member elected representatives on the Board. Either way ARRL can not be trusted to represent all amateur radio operators in a fair, equitable way as demonstrated in the discrepancy between the *ex parte* and Board resolution. No action should be taken on RM-11708, WT 16-239 until definitive rules are in place on where wideband digital and ACDS operate.

- **9.** There is nothing in RM-11708, WT 16-239, 19-1130, or the ARRL *ex parte*, that offers any protection for narrow bandwidth modes operating in the RTTY/Data segments of the amateur bands; or addresses the inherent incompatibility between wide bandwidth / narrow bandwidth modes sharing the same spectrum; or the absolute incompatibility of automatic / unattended modes of any bandwidth with any other amateur radio activity and which are a source of interference that can't be reasoned with over the air. By their inability to move or adequately detect channel activity these stations virtually 'own' a frequency. All ACDS activity, regardless of bandwidth, should be restricted to the current ACDS segments as requested in Minute 31 of the ARRL Board meeting, item 1, and recommended in the IARU Region 2 bandplan. All ACDS to be in one contiguous band segment.
- "(1)All automatically controlled digital stations (ACDS) below 30 MHz, regardless of bandwidth, are authorized to operate only within the ACDS bands designated in the FCC's Rules, 47 C.F.R. §97.221(b)"
- **10.** The FCC wisely made the decision long ago to separate Phone bandwidth emissions from the narrower CW and other emissions recognizing the incompatibility and reducing conflicts. Today we need a further definition of where wide bandwidth digital modes are allowed to operate. The problem

with digital modes is the actual payload can be anything from audio, to text, to images, to binary files –

which makes it very difficult to determine where they should be allowed, or even if these wider modes

are desirable or necessary in the crowded, narrow HF amateur bands when the trend is for ever more

narrow digital modes, for example PSK31, JT65/9, FT8, JS8Call, etc.

**11**. No updated proposed bandplan was presented as part of the ARRL *ex parte*, no proposed

changes to Part 97 to codify where wideband digital can operate. It has to be written as an official rule

or it will fail to provide the necessary protections for narrow band modes, voluntary band plans simply

don't work in the real world. This has to be accomplished before any rules changes to allow new

wideband emissions—a defined area of operation must be carved out of the limited amateur spectrum

to accommodate wideband digital if they are to be allowed at all. The ARRL recognizes this fact and is

attempting to regain some operating space from the 80m phone expansion for wideband digital,

primarily for ACDS (Winlink), but provides no guidance or suggestions for the rest of the amateur

bands.

Conclusion

At this point in time, and with the confusing conflicting signals coming from the ARRL, it may be wise

to scrap WT 16-239 and RM-11708 and start over with a comprehensive petition that addresses all the

points requested by the ARRL Board and incorporates meaningful digital transparency reforms and

rules clarifications before adding further complications by enacting the provisions of RM-11708 and

WT 16-239.

Respectfully submitted,

Ron Kolarik, ARS K0IDT

Date: November 30, 2019

### APPENDIX 1

## Begin forwarded message:

```
----- Original Message -----
Received: Wed, 05 Feb 2014 10:52:09 AM EST
From: <emrops@live.com>
To: <Winlink Programs Group@yahoogroups.com>
Subject: Re: [Winlink_Programs_Group] WL2K Integration

> Hi Larry,
>
> Can you tell me how the WL2K been used during recent emergencies; hurricanes, wildfires,
> tornadoes, floods etc.
>
> R~
```

Sent from my iPhone

>

On Feb 5, 2014, at 12:29 PM, "LARRY J. FORD" < lford@usa.net > wrote:

The most famous recent use was well-publicized in QST, etc., in the rescue of survivors from the the sinking of the Bounty.

"Faunt told the ARRL that the Bounty crew tried various methods, including a satellite phone, to call for help, 'but we got nothing when tried calling out on HF. We tried calling the Maritime Mobile Net, but nothing was out there. We had Winlink on the ship that we used for e-mail and accessing the Internet to post to blogs and to Facebook, and we finally found an e-mail address for the Coast Guard. As a last-ditch effort, we used Winlink to e-mail the Coast Guard for help. Within an hour, we heard a C-130 plane, and later, a helicopter overhead."

See: http://www.arrl.org/news/robin-walbridge-kd4ohz-missing-at-sea-after-sinking-of-tall-ship-embounty-em-ship-s-electrician-dou Aside from that, numerous State and Local EOCs, ARES, MARS and other EMCOMM groups incorporate the Winlink system in their EMCOMM plans.

Larry J. Ford K4AEC

**From:** "<u>k4cjx@comcast.net</u>" <<u>k4cjx@comcast.net</u>>

**Date:** February 5, 2014 at 5:51:25 PM EST

To: "Winlink Programs Group@yahoogroups.com"

<Winlink Programs Group@yahoogroups.com>

Cc: "< Winlink Programs Group@yahoogroups.com>"

<Winlink Programs Group@yahoogroups.com>

Subject: Re: [Winlink\_Programs\_Group] WL2K Integration

**Reply-To:** Winlink Programs Group@yahoogroups.com

All,

That IS an excellent example. You won't see many. Privacy is critical with such events. You would not want your name all over creation if you screwed up and destroyed part of your vessel or lost your way! (highlighting added)

Steve, k4cjx

### APPENDIX 2

Screen captures from the Winlink viewer demonstrating use on a 'regular basis'. Trimmed to fit page, first example contains complete information before trimming.

View	11/25/19 16:54	WBIBR	VEIYZ	CMS-B	WBIBR	WBIBR	WB1BR	146	0	7.097 MHz	Express
View	11/25/19 7:32	WB2CWD	VEIYZ	CMS-B	WB2CWD	WB2CWD	A great note from Herb	692	0	7.097 MHz	Airmail
View	11/25/19 7:32	WB2CWD	VEIYZ	CMS-B	WB2CWD	WB2CWD	Re: My last email for this passage (ho	318	0	7.097 MHz	Airmail
View	11/25/19 7:25	WB2CWD	VE1YZ	CMS-B	SMTP	hehilgen@sympatico.ca	Re: My last email for this passage (ho	701	0	7.097 MHz	Airmail
View	11/25/19 1:37	WB2CWD	VE1YZ	CMS-A	WB2CWD	WB2CWD	Important try for Herb Hilgenberg	1562	0	7.097 MHz	Airmail
View	11/25/19 1:36	WB2CWD	VE1YZ	CMS-A	WB2CWD	WB2CWD	Get This Book	911	0	7.097 MHz	Airmail
View	11/25/19 1:18	WB2CWD	VEIYZ	CMS-A	SMTP	handdoc@optonline.net	Re: My last email for this passage (ho	488	0	7.097 MHz	Airmail
View	11/25/19 0:15	WB2CWD	VEIYZ	CMS-A	WB2CWD	WB2CWD	Reiners Ashes	846	0	7.097 MHz	Airmail
View	11/25/19 0:15	WB2CWD	VE1YZ	CMS-A	WB2CWD	WB2CWD	My last email for this passage (hopeful	2334	0	7.097 MHz	Airmail
View	11/24/19 21:38	WB2CWD	VE1YZ	CMS-A	WB2CWD	WB2CWD	found it.	330	0	14.114 MHz	Airmail
View	11/24/19 20:34	PD2HVG	VE1YZ	CMS-B	KH2TD	KH2TD	st maarten	3806	0	10.129 MHz	Airmail
							I control of the cont	1			

*	Timestamp	Callsign	Gateway	CMS	Source	Sender	Subject
View	11/29/19 3:52	KE5JFI	KH6UL	CMS-B	KE5JFI	KE5JFI	Depart
View	11/29/19 3:52	KE5JFI	KH6UL	CMS-B	KE5JFI	KESJFI	Coucou
View	11/29/19 3:18	KE5JFI	KH6UL	CMS-A	KE5JFI	KE5JFI	Coucou
View	11/29/19 3:10	KE5JFI	KH6UL	CMS-A	KE5JFI	KESJFI	Saildocs Request
View	11/28/19 3:06	KE5JFI	KH6UL	CMS-A	KE5JFI	KE5JFI	Retour
View	11/28/19 3:06	KE5JFI	KH6UL	CMS-A	KE5JFI	KESJFI	Saildocs Request
View	11/27/19 4:11	KE5JFI	KH6UL	CMS-B	KE5JFI	KE5JFI	Last sprint
View	11/27/19 4:11	KE5JFI	KH6UL	CMS-B	KE5JFI	KE5JFI	Retour
View	11/27/19 3:31	KE5JFI	KH6UL	CMS-A	KE5JFI	KE5JFI	Saildocs Request
View	11/26/19 5:07	KE5JFI	KH6UL	CMS-B	KE5JFI	KE5JFI	Bisous
View	11/26/19 5:07	KE5JFI	KH6UL	CMS-B	KE5JFI	KE5JFI	Tahanéa

View	11/26/19 4:25	KE5JFI	KH6UL	CMS-B	KE5JFI	KE5JFI	Saildocs Request
View	11/25/19 3:24	KE5JFI	KH6UL	CMS-B	KE5JFI	KE5JFI	Saildocs Request
View	11/24/19 4:08	KE5JFI	KH6UL	CMS-B	KE5JFI	KE5JFI	Super
View	11/24/19 3:29	KE5JFI	KH6UL	CMS-A	KE5JFI	KE5JFI	Saildocs Request
View	11/23/19 4:05	KE5JFI	KH6UL	CMS-B	KE5JFI	KE5JFI	Ma cherie
View	11/23/19 3:42	KE5JFI	KH6UL	CMS-B	KE5JFI	KE5JFI	Reponse
View	11/23/19 2:51	KE5JFI	KH6UL	CMS-A	KE5JFI	KE5JFI	Saildocs Request
View	11/22/19 6:08	KE5JFI	KH6UL	CMS-B	KE5JFI	KE5JFI	Instructions
View	11/22/19 6:00	KE5JFI	KH6UL	CMS-A	KE5JFI	KE5JFI	Nouvel Atoll
View	11/22/19 5:16	KE5JFI	KH6UL	CMS-A	KE5JFI	KE5JFI	Out of range
View	11/22/19 4:41	KE5JFI	KH6UL	CMS-A	KE5JFI	KE5JFI	Coucou
W	11/22/10 4-12	MESTEL	PITCIT	CA IC D	PECIEI	שויים	T-1

					1	
11/25/19 16:54	WB1BR	VE1YZ	CMS-B	WB1BR	WB1BR	WB1BR
11/25/19 7:32	WB2CWD	VE1YZ	CMS-B	WB2CWD	WB2CWD	A great note from Herb
11/25/19 7:32	WB2CWD	VE1YZ	CMS-B	WB2CWD	WB2CWD	Re: My last email for this passage (ho
11/25/19 7:25	WB2CWD	VE1YZ	CMS-B	SMTP	hehilgen@sympatico.ca	Re: My last email for this passage (ho
11/25/19 1:37	WB2CWD	VE1YZ	CMS-A	WB2CWD	WB2CWD	Important try for Herb Hilgenberg
11/25/19 1:36	WB2CWD	VE1YZ	CMS-A	WB2CWD	WB2CWD	Get This Book
11/25/19 1:18	WB2CWD	VE1YZ	CMS-A	SMTP	handdoc@optonline.net	Re: My last email for this passage (ho
11/25/19 0:15	WB2CWD	VE1YZ	CMS-A	WB2CWD	WB2CWD	Reiners Ashes
11/25/19 0:15	WB2CWD	VE1YZ	CMS-A	WB2CWD	WB2CWD	My last email for this passage (hopeful
11/24/19 21:38	WB2CWD	VE1YZ	CMS-A	WB2CWD	WB2CWD	found it.
11/24/19 20:34	PD2HVG	VE1YZ	CMS-B	KH2TD	KH2TD	st maarten

11/24/19 20:34	PD2HVG	VEIYZ	CMS-B	KH2TD	KH2TD	st maarten
11/24/19 19:25	WB2CWD	VE1YZ	CMS-A	WB2CWD	WB2CWD	Re: How do I index my outlook file?
11/24/19 19:24	WB2CWD	VE1YZ	CMS-A	SMTP	kbair@optonline.net	RE: RE: How do I index my outlook fi.
11/24/19 18:08	WB2CWD	VE1YZ	CMS-B	WB2CWD	WB2CWD	RE: Hi from Eric on Kiberlite Part 3
11/24/19 17:58	WB2CWD	VE1YZ	CMS-A	SMTP	kbair@optonline.net	RE: How do I index my outlook file ?
11/24/19 17:58	WB2CWD	VE1YZ	CMS-A	SMTP	milesbid@gmail.com	RE: Hi from Eric on Kiberlite Part 3
11/24/19 17:57	WB2CWD	VE1YZ	CMS-A	WB2CWD	WB2CWD	Fwd: RE: How do I index my outlook
11/24/19 13:27	KQ4EY	VE1YZ	CMS-B	KQ4EY	KQ4EY	POSITION REPORT
11/24/19 11:48	N1GB	VE1YZ	CMS-B	SMTP	george.blakeslee@gmail.com	Re: //WL2K Nov test
11/24/19 9:02	WB2CWD	VE1YZ	CMS-A	WB2CWD	WB2CWD	RE: How do I index my outlook file?
11/24/19 8:49	WB2CWD	VE1YZ	CMS-A	SMTP	kbair@optonline.net	RE: How do I index my outlook file?
11/04/10/7 55	HIDOCHID.	T TT 4 3777	CO 10 A	TIMO CITIMO	UMACUM	THE P. MILE D.A.

11/24/19 8:49	WB2CWD	VEIYZ	CMS-A	SMTP	kbair@optonline.net	RE: How do I index my outlook file ?
11/24/19 7:55	WB2CWD	VE1YZ	CMS-A	WB2CWD	WB2CWD	Hi from Eric on Kiberlite Part 4
11/24/19 7:47	WB2CWD	VE1YZ	CMS-A	WB2CWD	WB2CWD	Hi from Eric on Kiberlite Part 3
11/24/19 6:56	WB2CWD	VE1YZ	CMS-A	WB2CWD	WB2CWD	Hi from Eric on Kiberlite Part 2
11/24/19 2:27	WB2CWD	VE1YZ	CMS-A	WB2CWD	WB2CWD	Hi from Eric on Kiberlite Part 1
11/24/19 1:58	WB2CWD	VE1YZ	CMS-B	WB2CWD	WB2CWD	Fwd: Re: Hi from Eric on Kimberlite
11/24/19 1:58	WB2CWD	VE1YZ	CMS-B	WB2CWD	WB2CWD	Re: Hi from Eric on Kimberlite
11/24/19 1:43	WB2CWD	VE1YZ	CMS-B	SMTP	hehilgen@sympatico.ca	Re: Hi from Eric on Kimberlite
11/24/19 1:41	WB2CWD	VE1YZ	CMS-B	WB2CWD	WB2CWD	Re: Hi from Eric
11/24/19 1:41	WB2CWD	VE1YZ	CMS-B	WB2CWD	WB2CWD	RE: Hi from Eric on Kimberlite
11/23/19 22:24	WB2CWD	VE1YZ	CMS-B	WB2CWD	WB2CWD	Re: Hi from Eric on Kimberlite
11/23/19 22-24	WB2CWD	VF1YZ	CMS-B	WB2CWD	WB2CWD	Re: Hi from Fric on Kimberlite